

FIG. 1

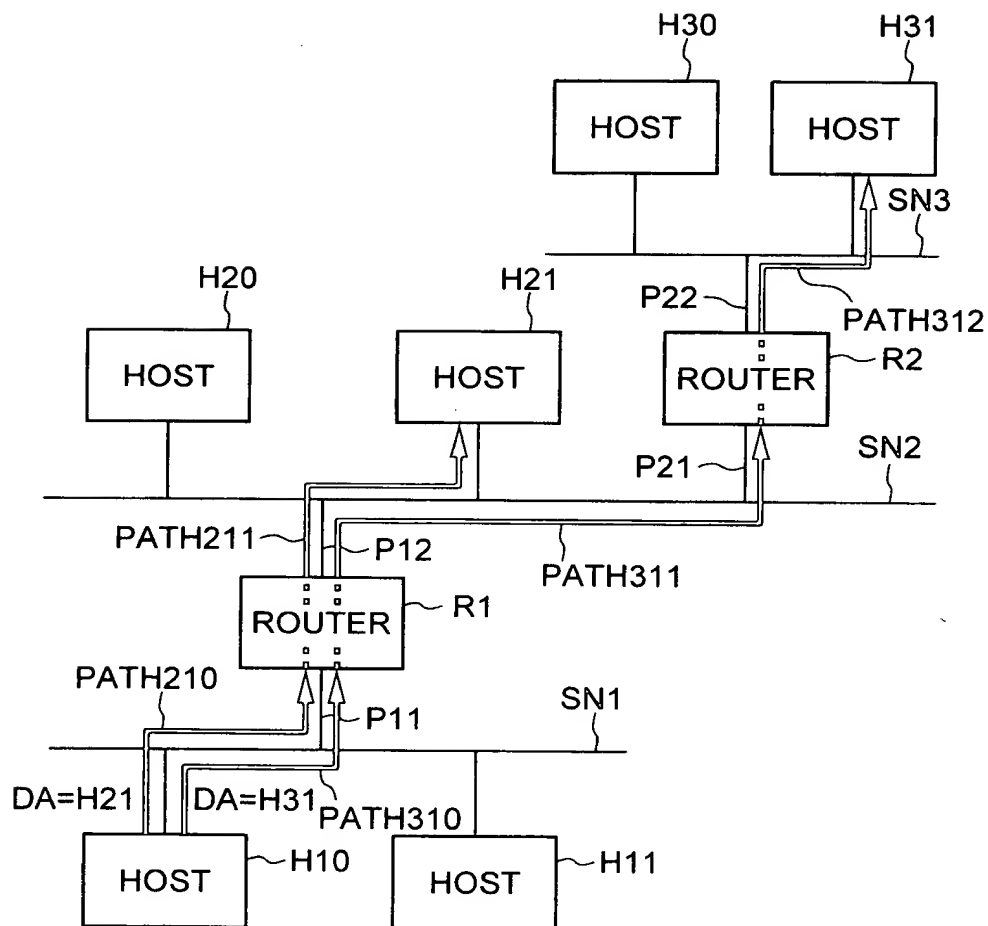
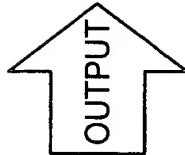
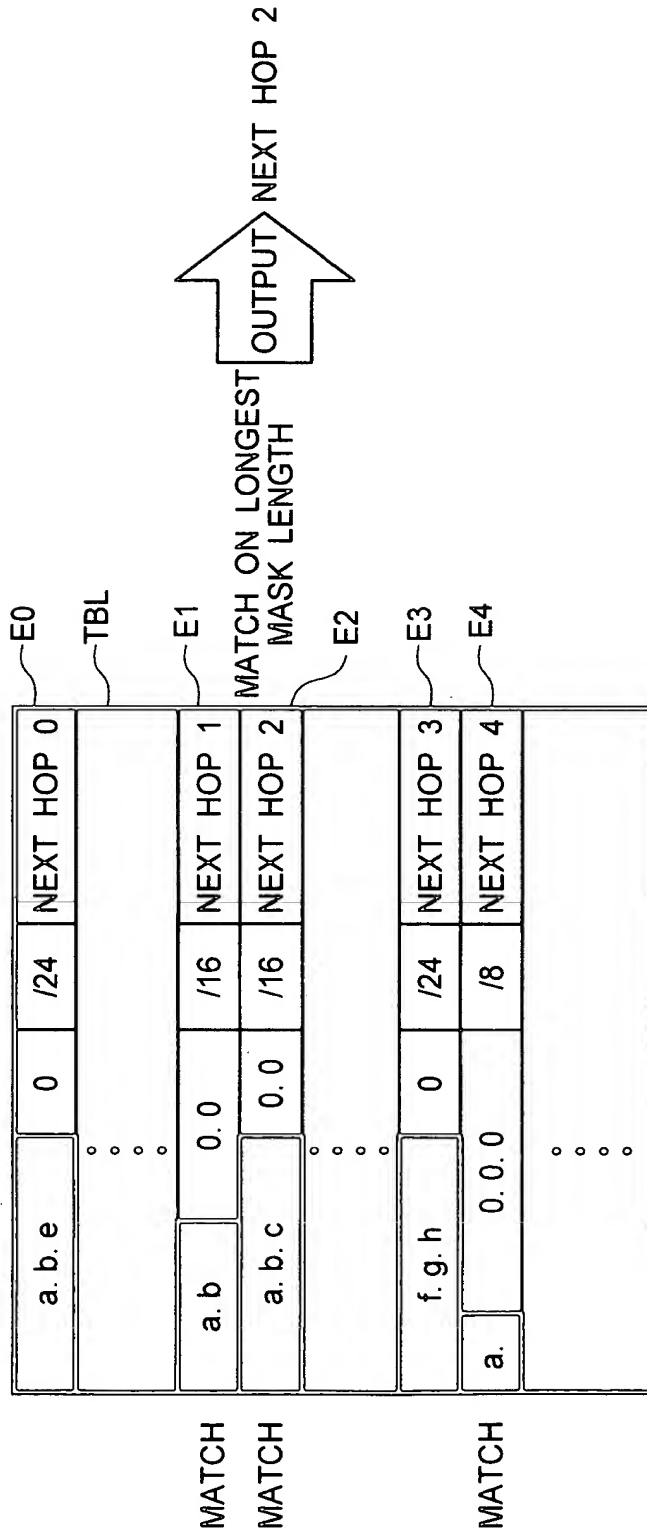


FIG. 2

DESTINATION ADDRESS = A, B, C, D



LEGEND: MASK LENGTH



SUB-NETWORK ADDRESS	MASK LENGTH	NEXT HOP INFORMATION
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FIG. 3

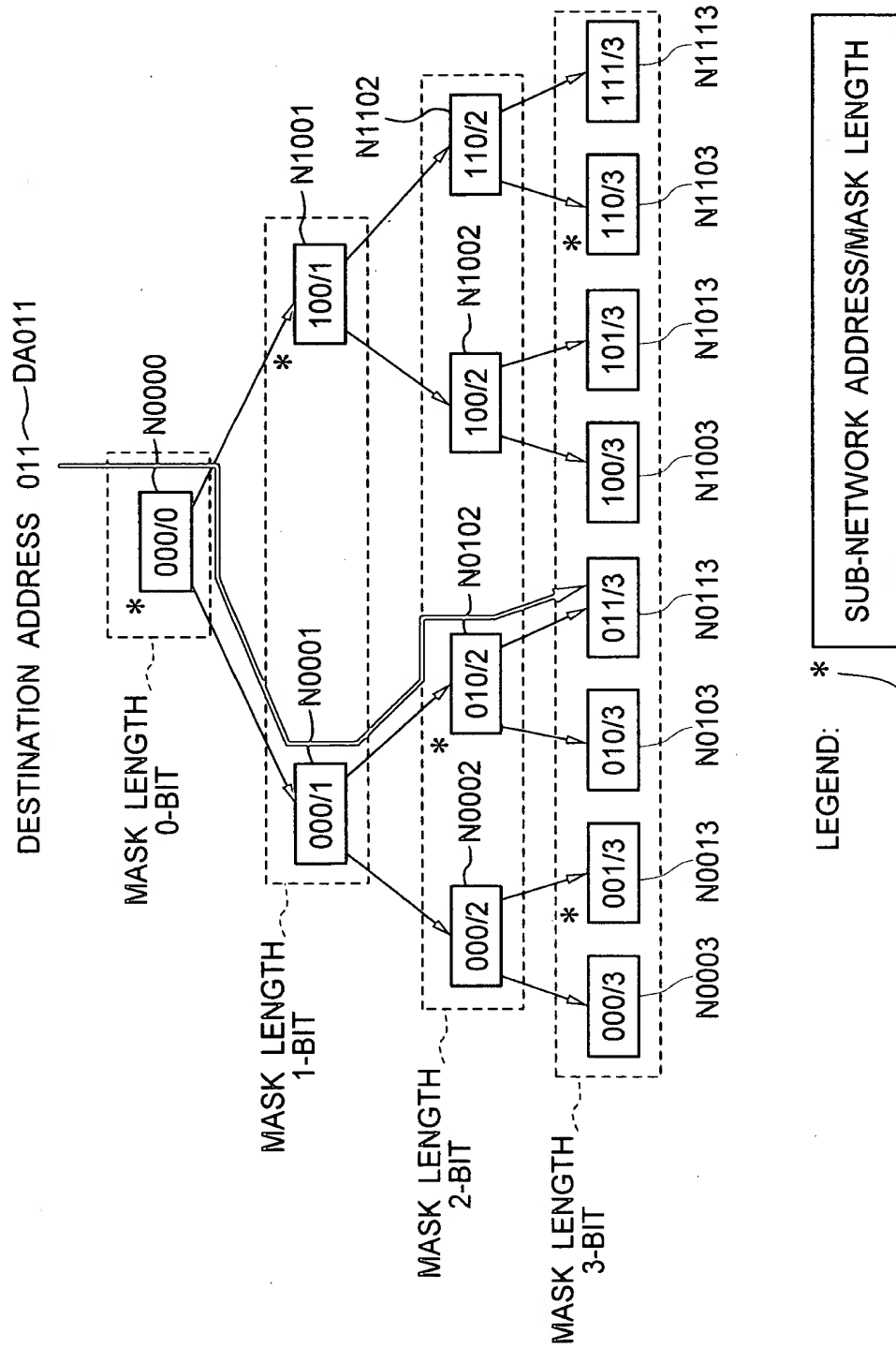


FIG. 4

PATH TABLE

SUB-NETWORK ADDRESS	/	MASK LENGTH
000	/	0
001	/	3
010	/	2
100	/	1
110	/	3

FIG. 5

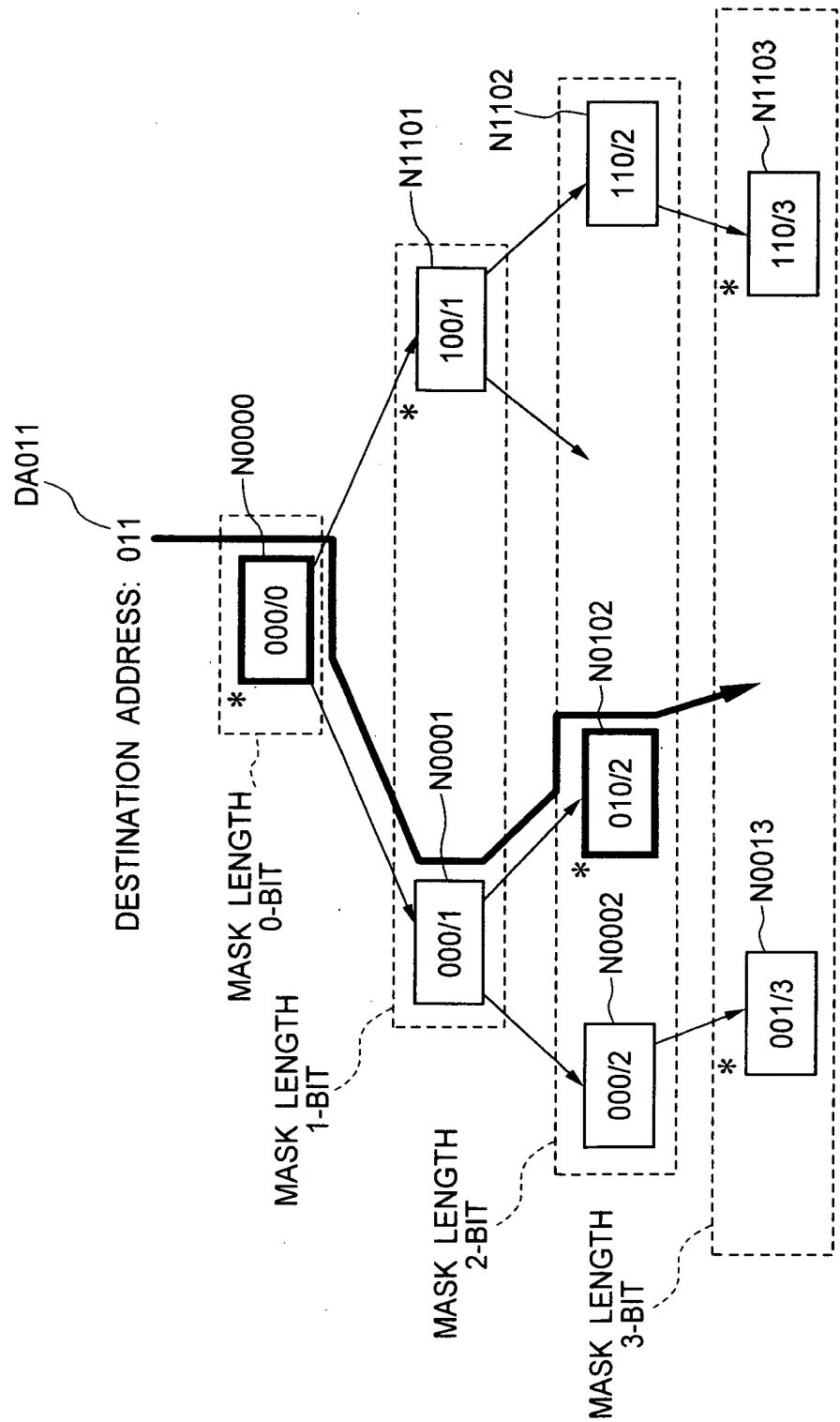


FIG. 6

PATH TABLE

SUB-NETWORK ADDRESS	/	MASK LENGTH
0x00. 00. 00. 00	/	0
0x85. 04. 00. 00	/	16
0x85. 05. 00. 00	/	16

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FIG. 7

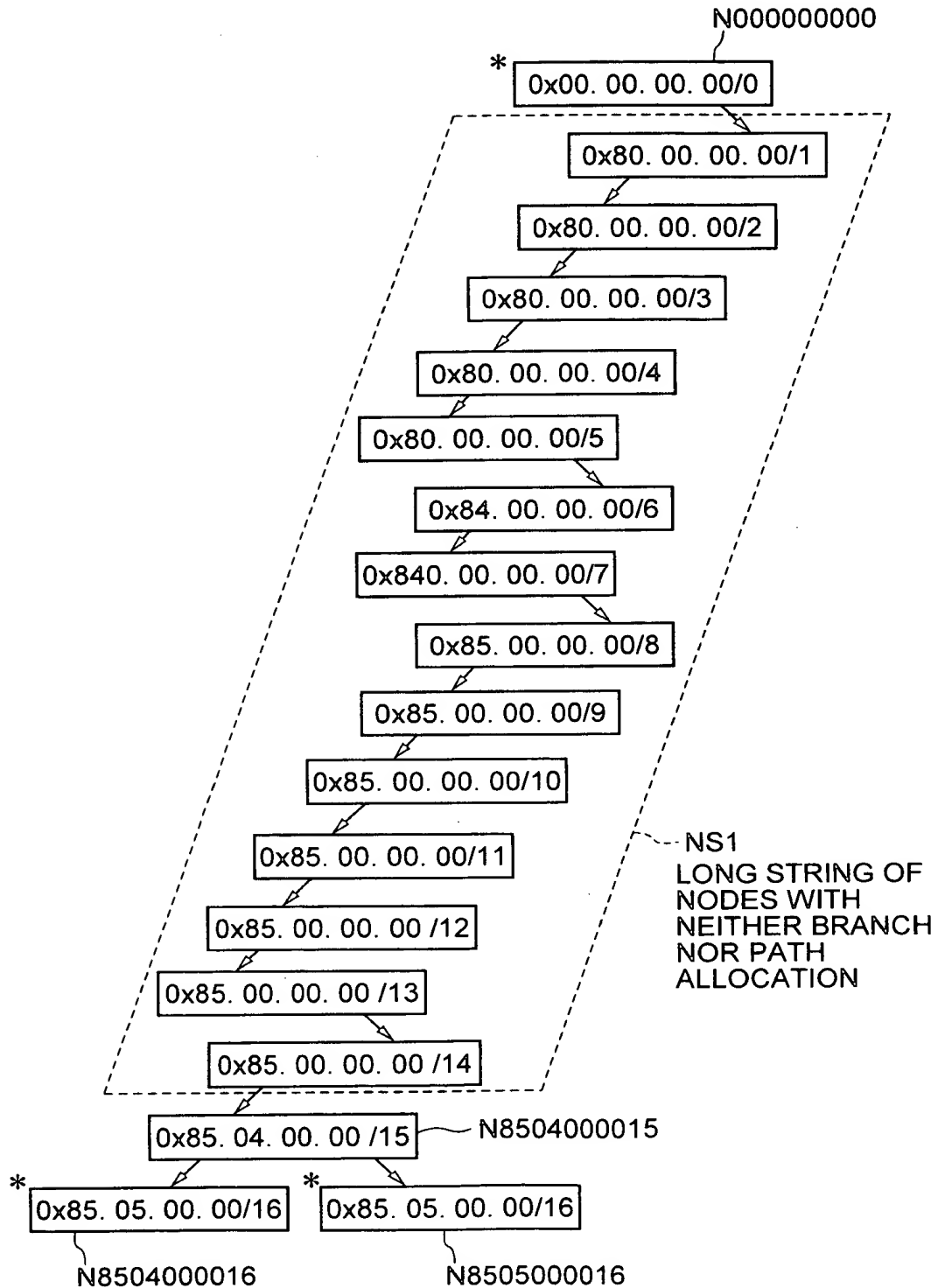
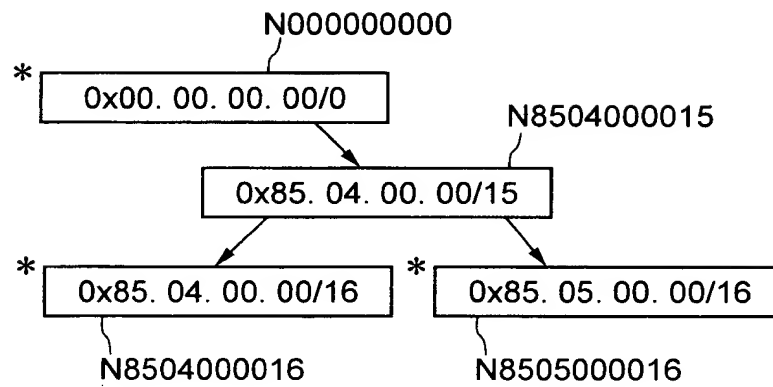


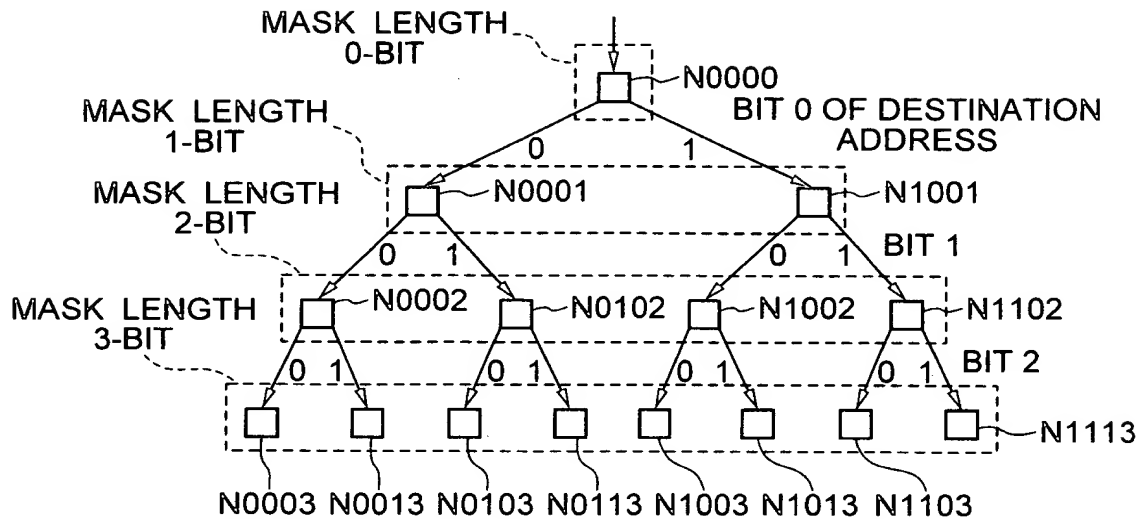
FIG. 8



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FIG. 9

(a)



(b)

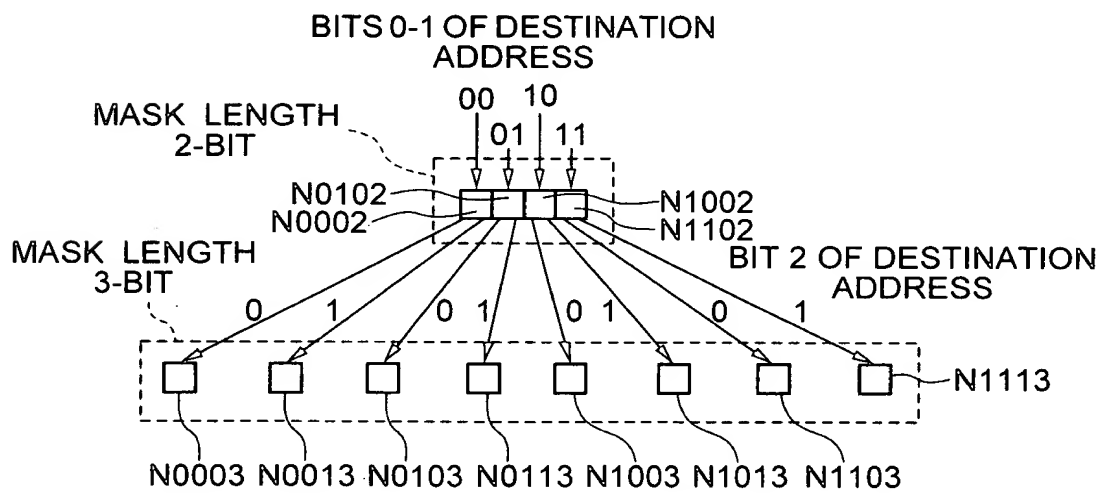


FIG. 10

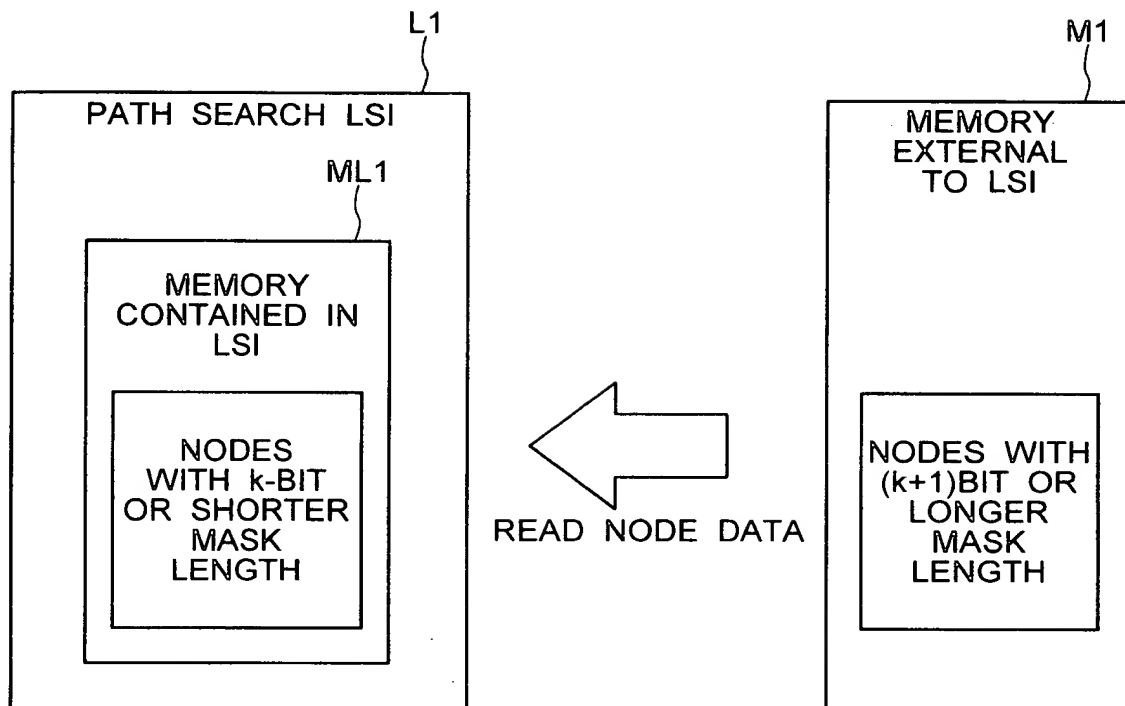


FIG. 11

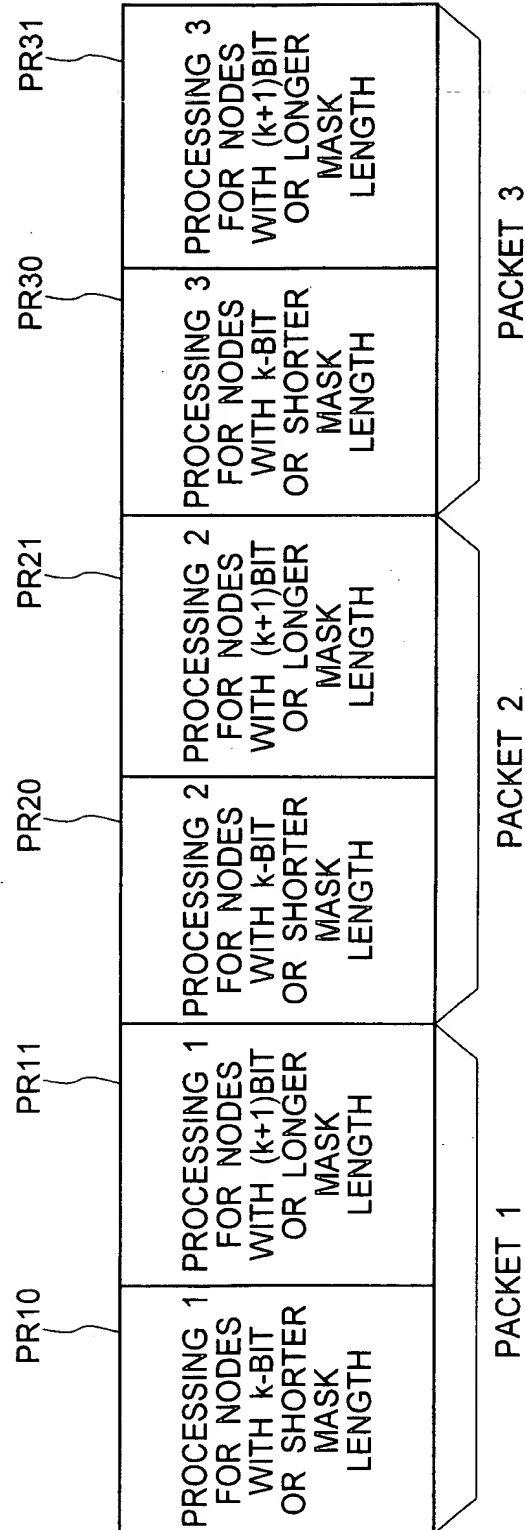
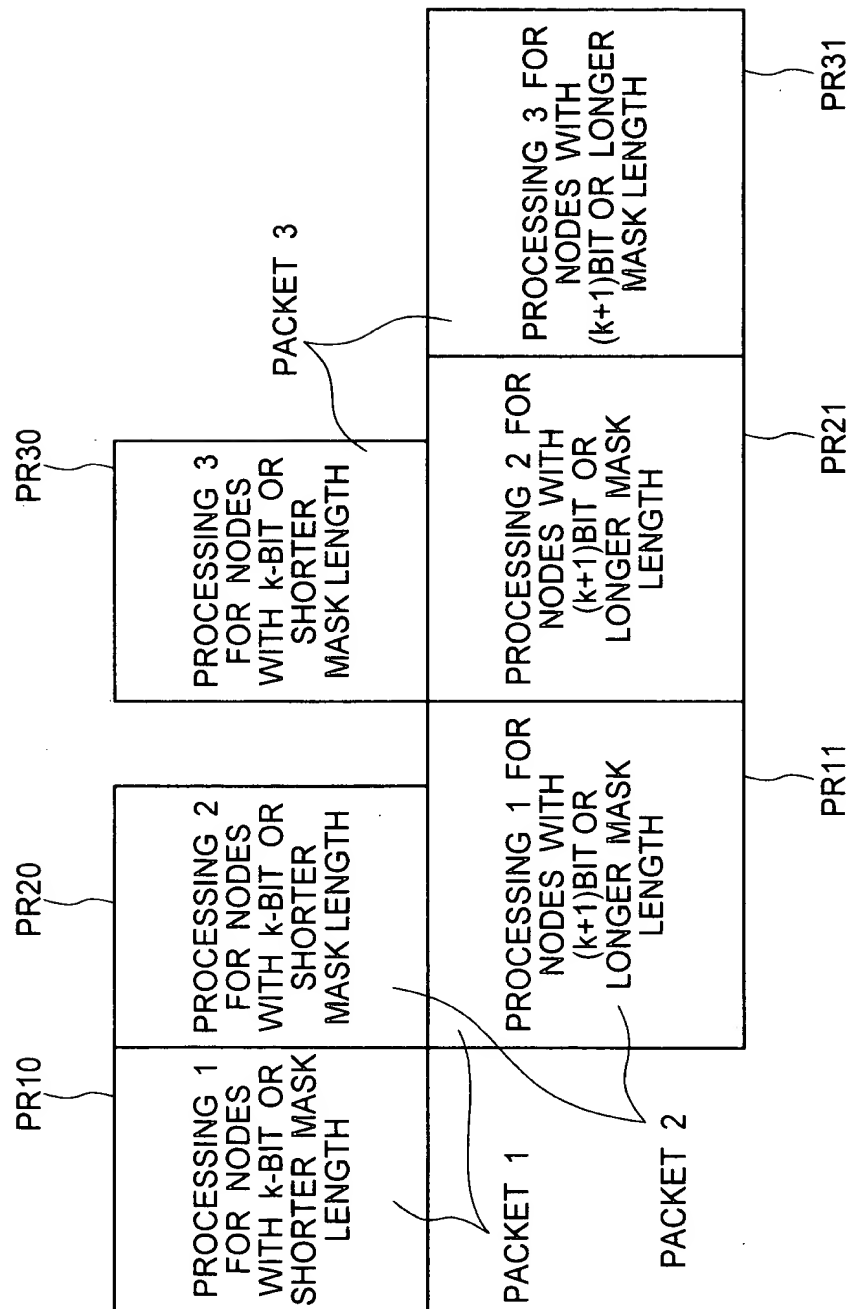


FIG. 12



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FIG. 13

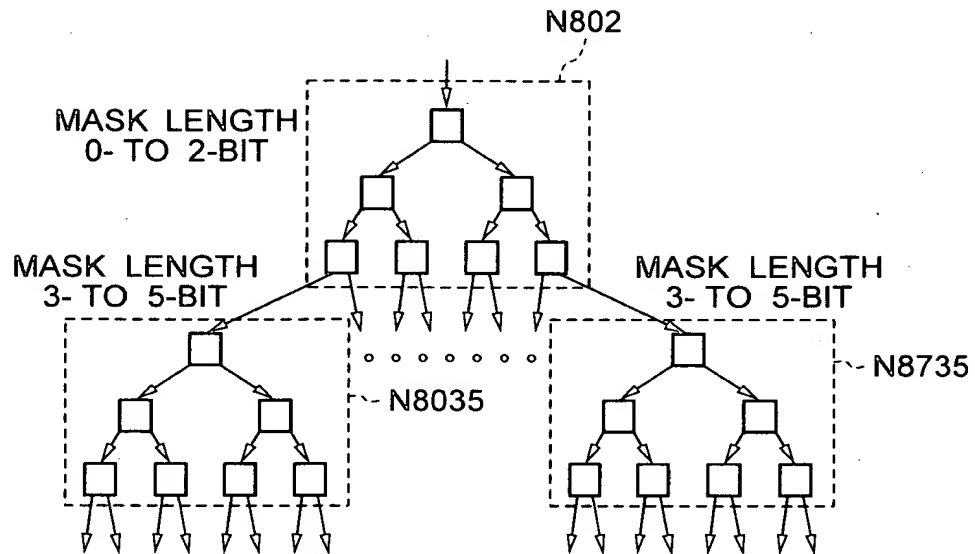


FIG. 14

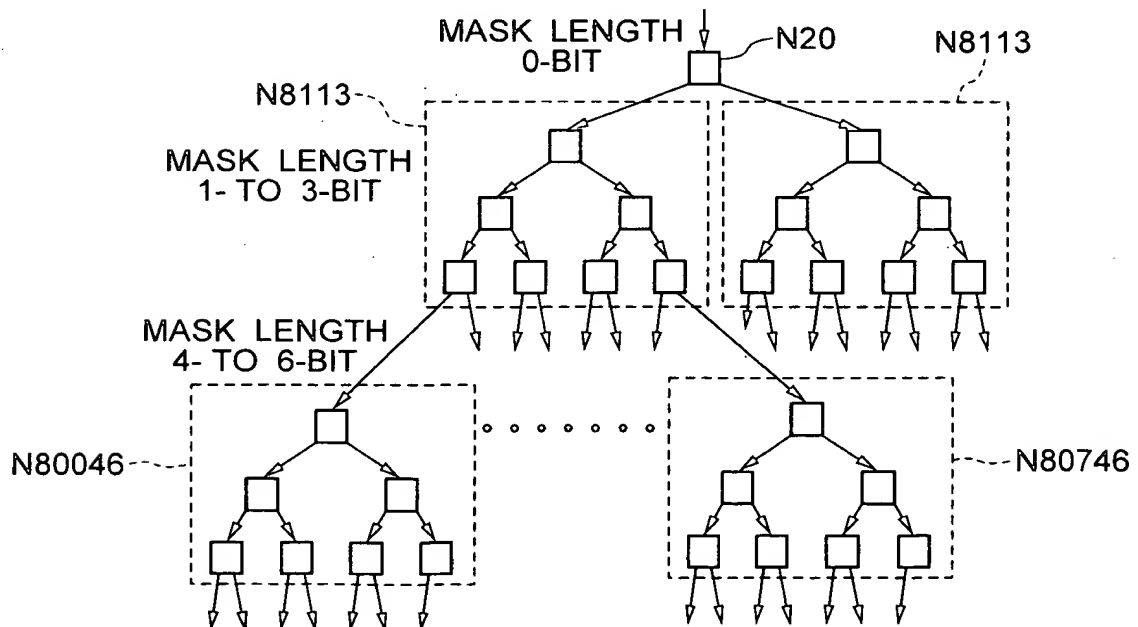
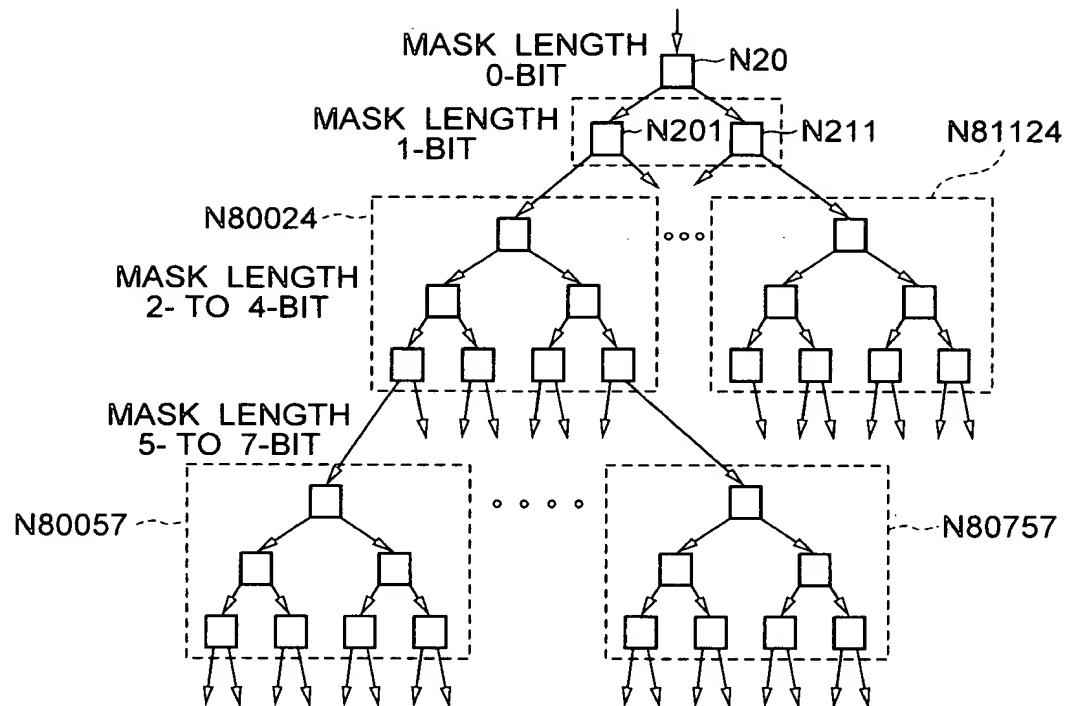


FIG. 15



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FIG. 16

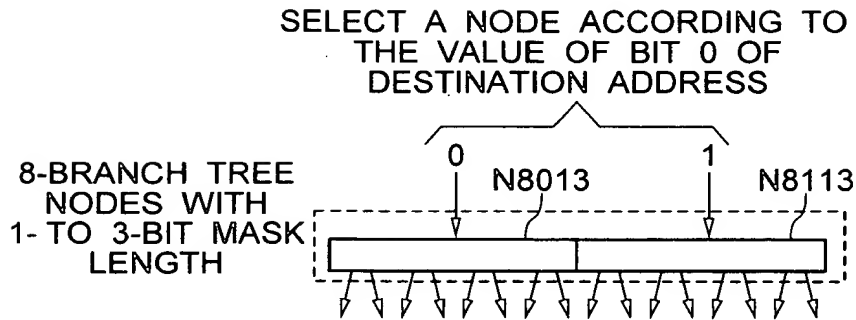
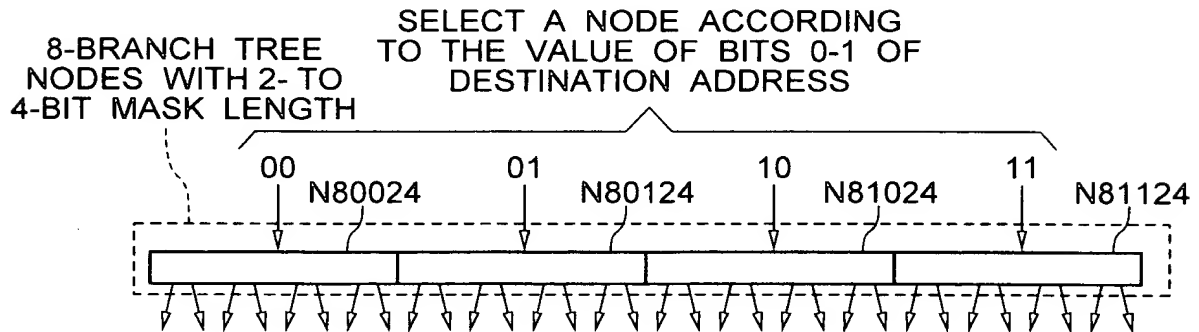


FIG. 17



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FIG. 18

SELECT A NODE ACCORDING
TO THE VALUE OF BITS 0-2 OF
DESTINATION ADDRESS

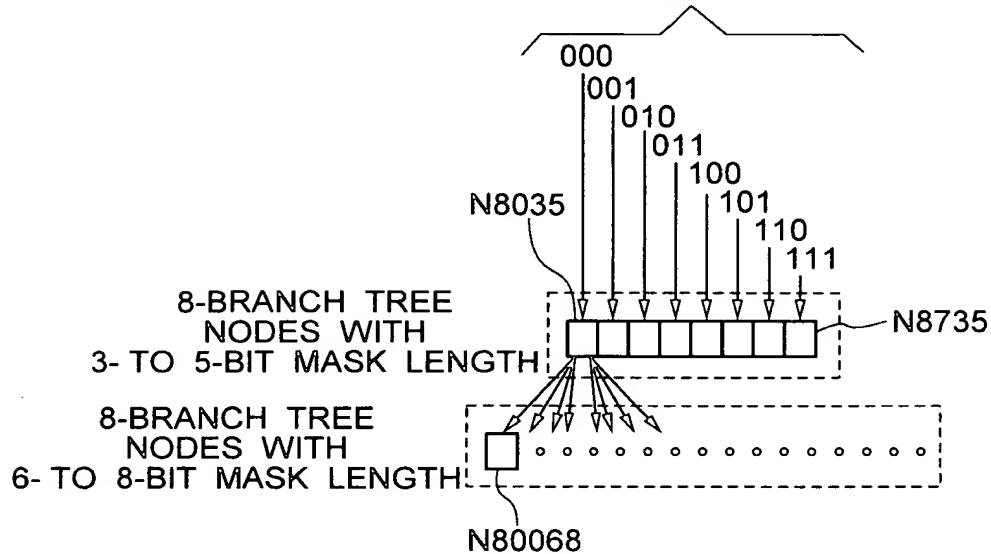


FIG. 19

SELECT A NODE ACCORDING
TO THE VALUE OF BITS 0-3 OF
DESTINATION ADDRESS

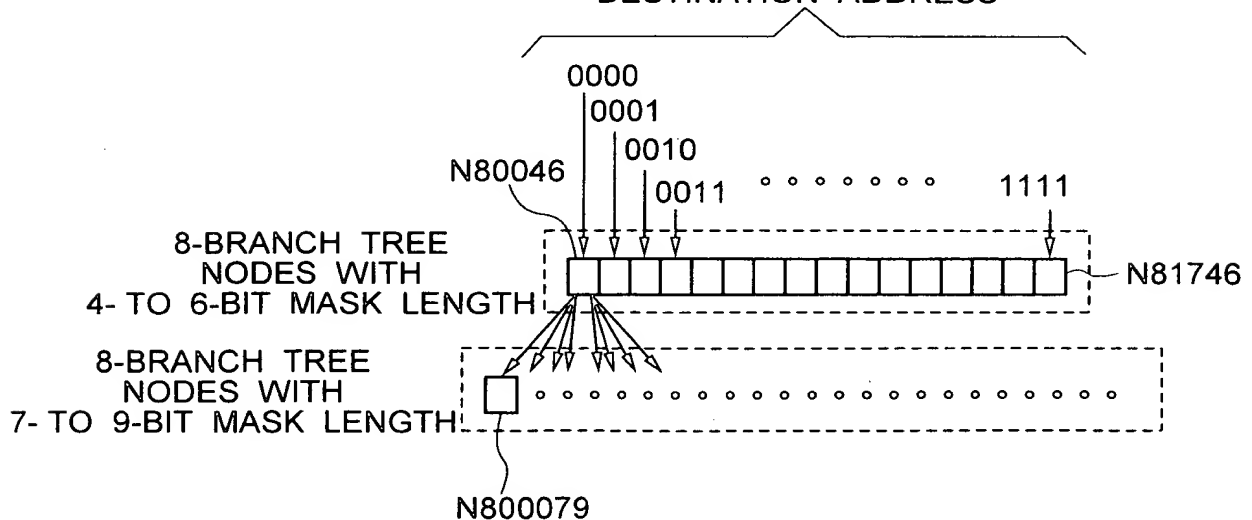
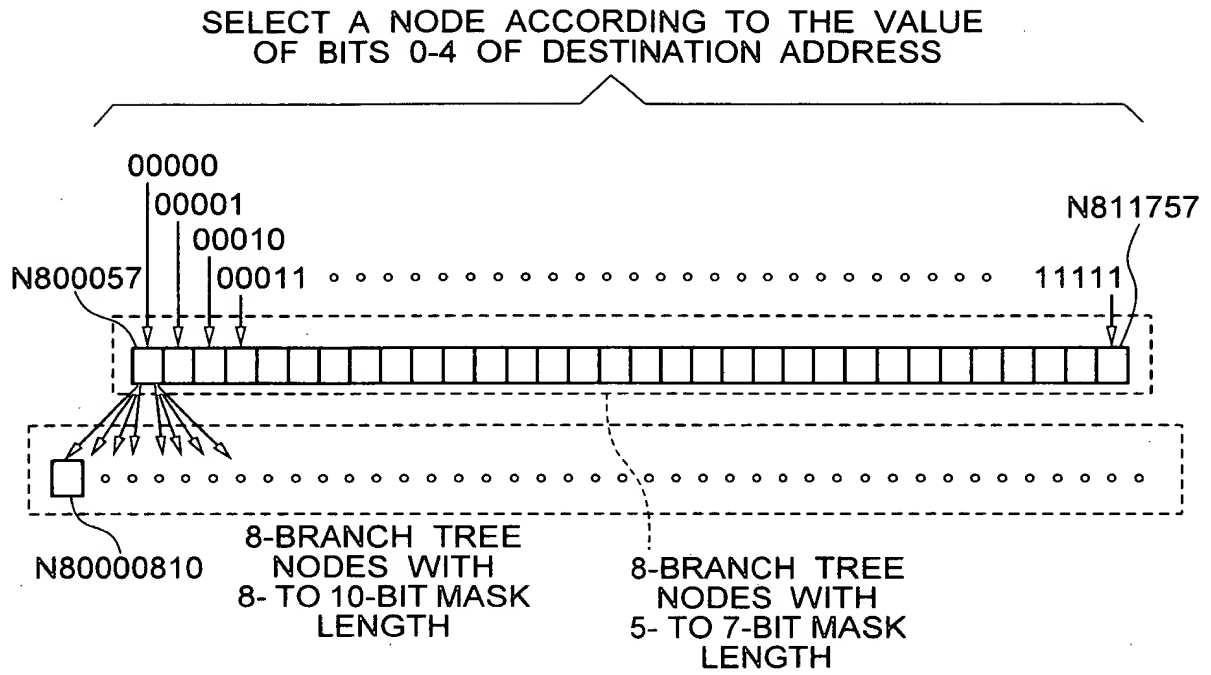
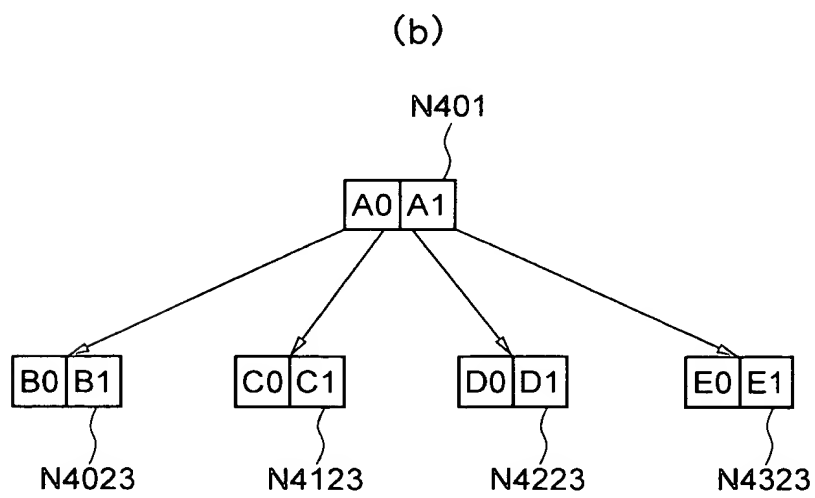
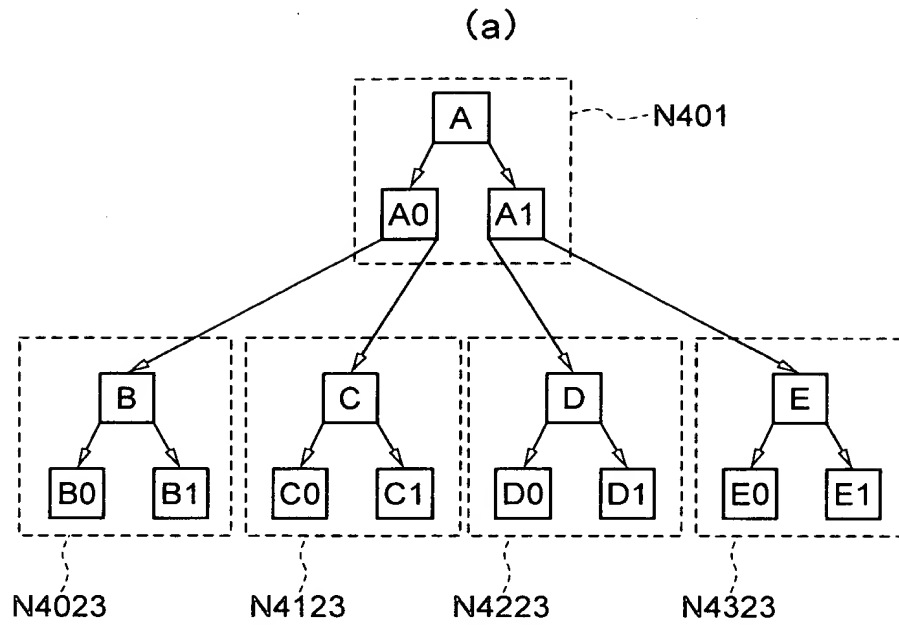


FIG. 20



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FIG. 21



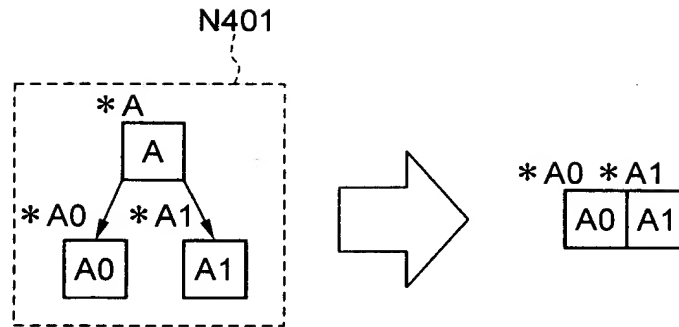
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FIG. 22

FIG. 23

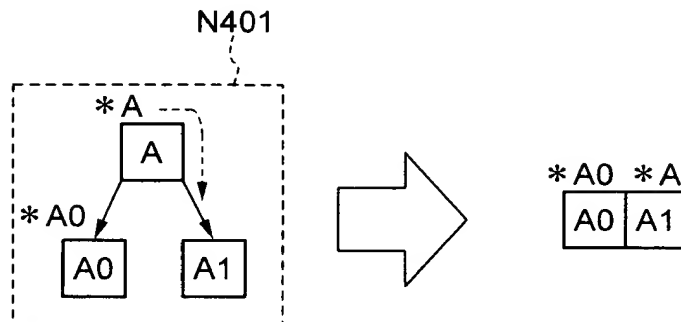
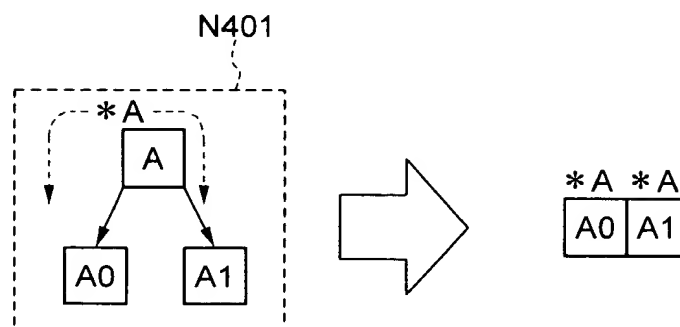


FIG. 24



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FIG. 25

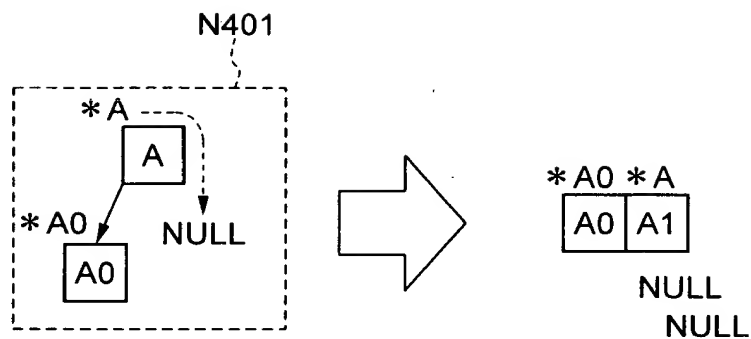


FIG. 26

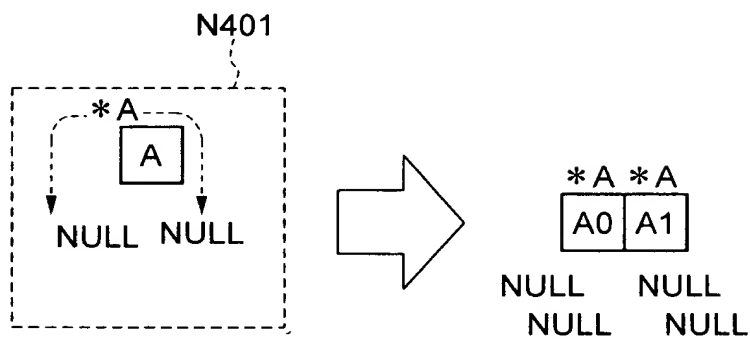


FIG. 27

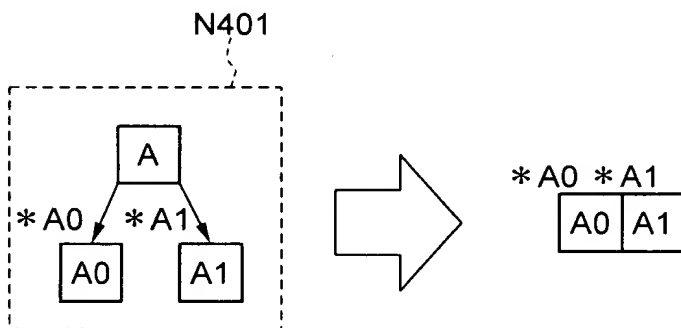


FIG. 28

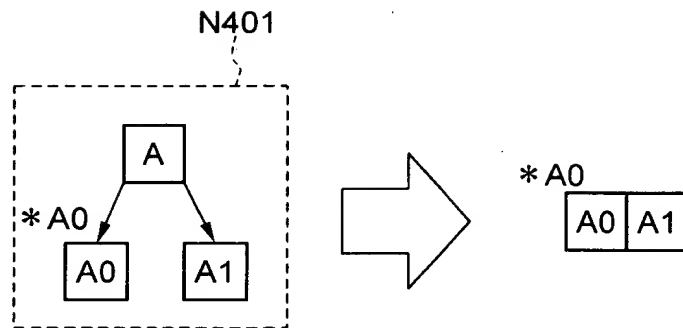


FIG. 29

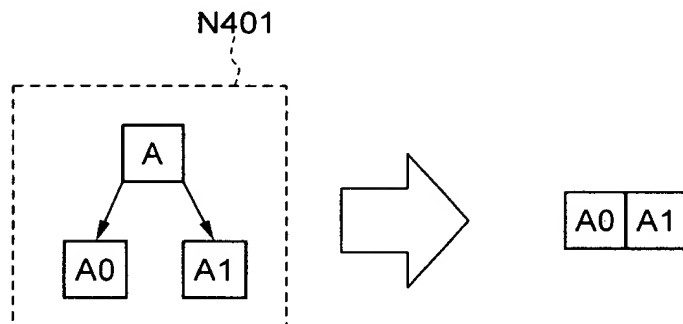


FIG. 30

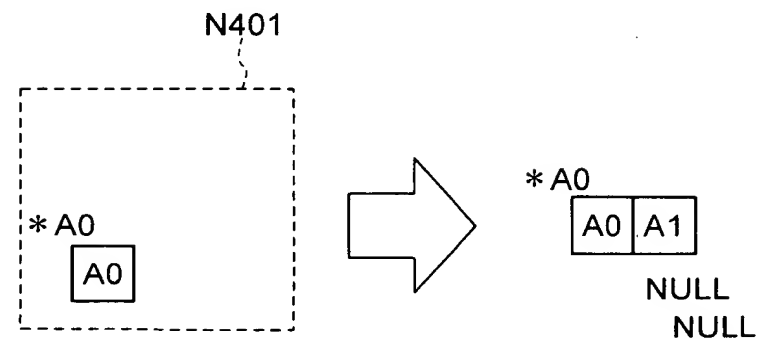
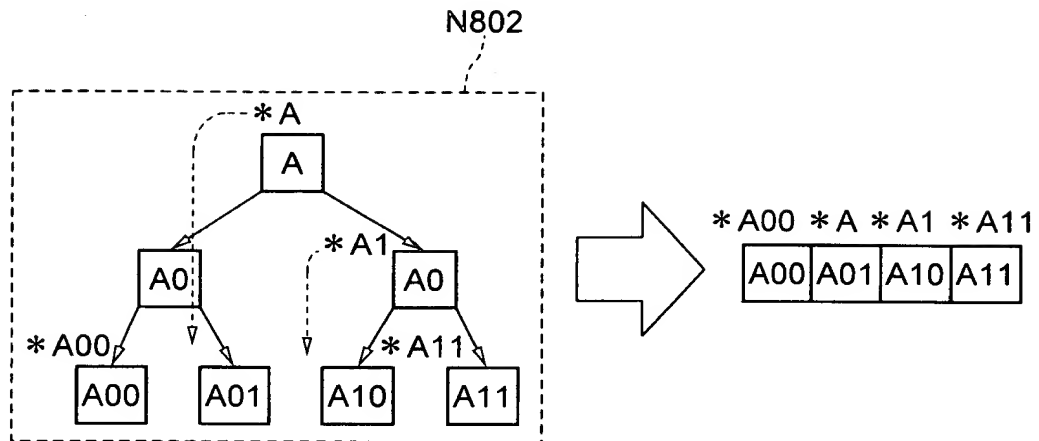


FIG. 31

(a)



(b)

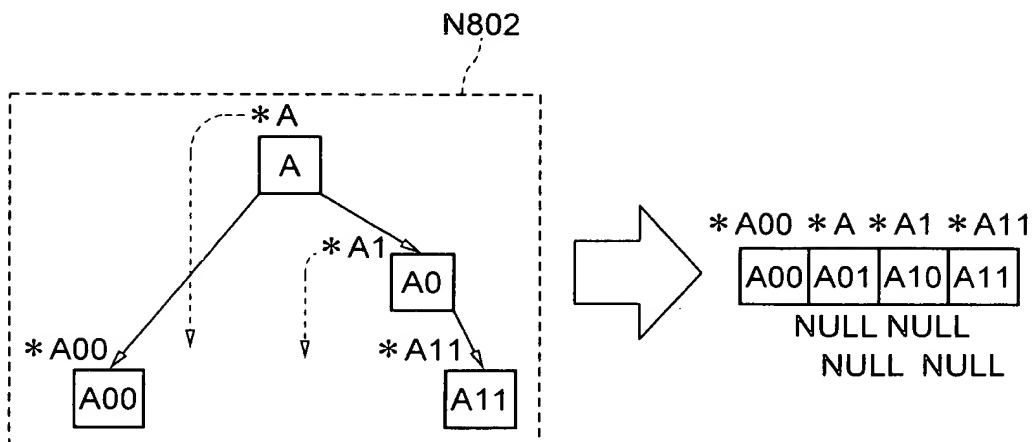


FIG. 32

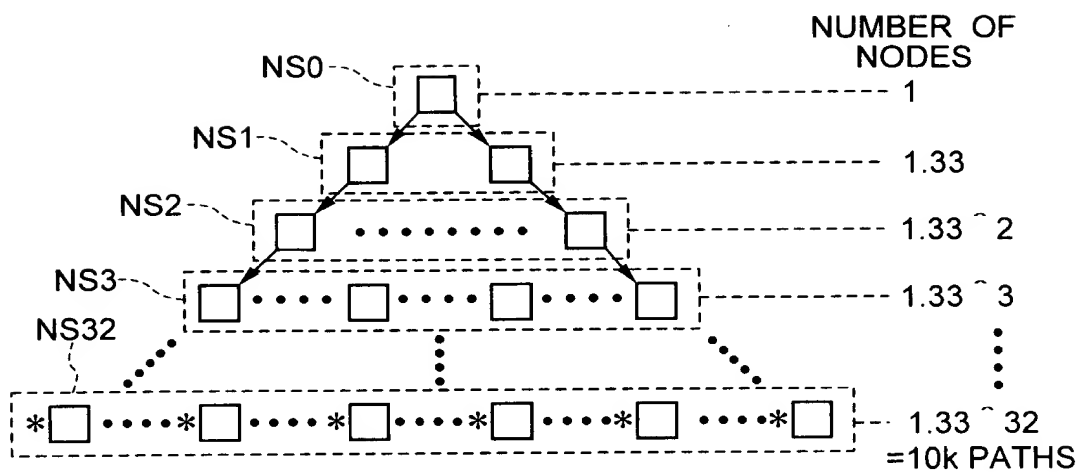
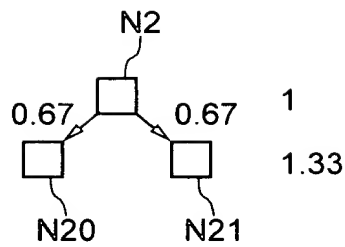


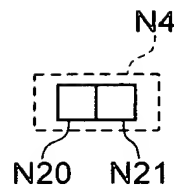
FIG. 33

(a)



AVERAGE: $1 + 1.33 =$ MEMORY
AMOUNT FOR 2.33 2-BRANCH
TREE NODES

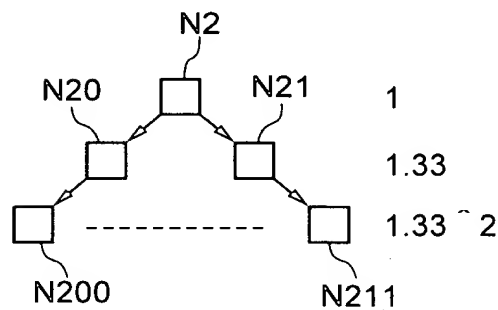
2-BRANCH TREE NODE



MEMORY AMOUNT FOR
2 2-BRANCH TREE NODES

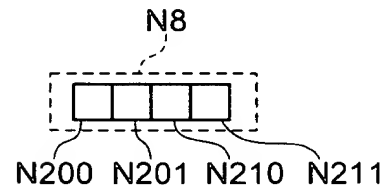
4-BRANCH TREE NODE

(b)



AVERAGE: $1 + 1.33 + 1.33 \wedge 2 =$
MEMORY AMOUNT FOR
4.11 2-BRANCH TREE NODES

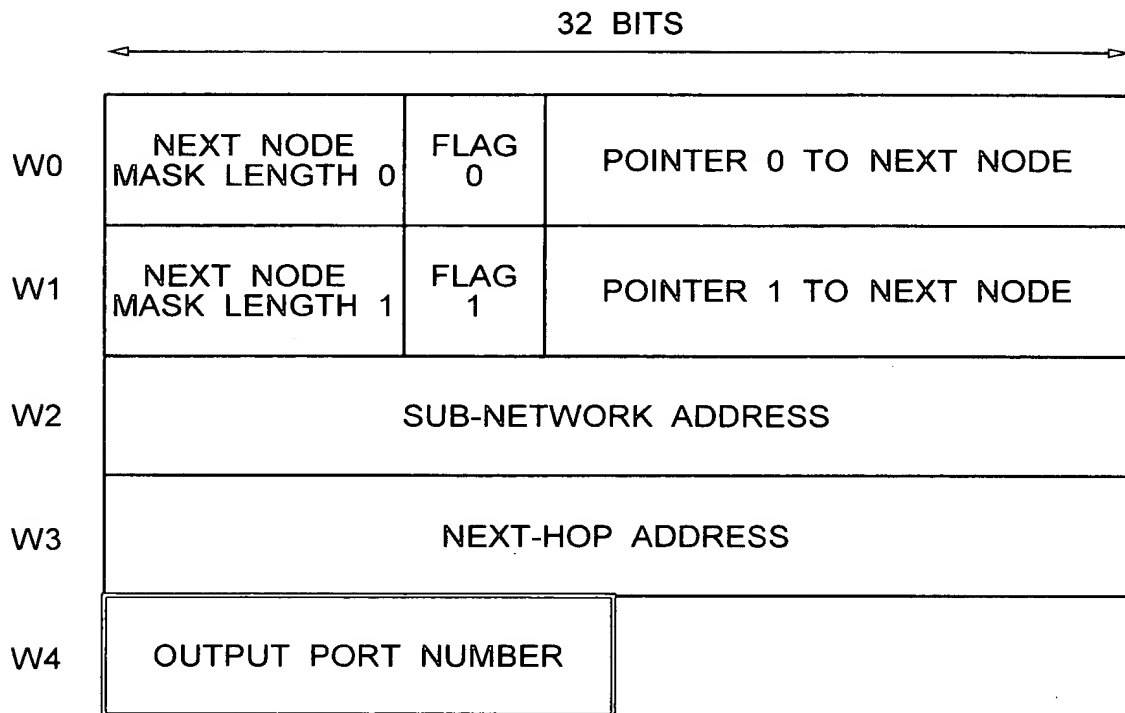
2-BRANCH TREE NODE



MEMORY AMOUNT FOR
4 2-BRANCH TREE NODES

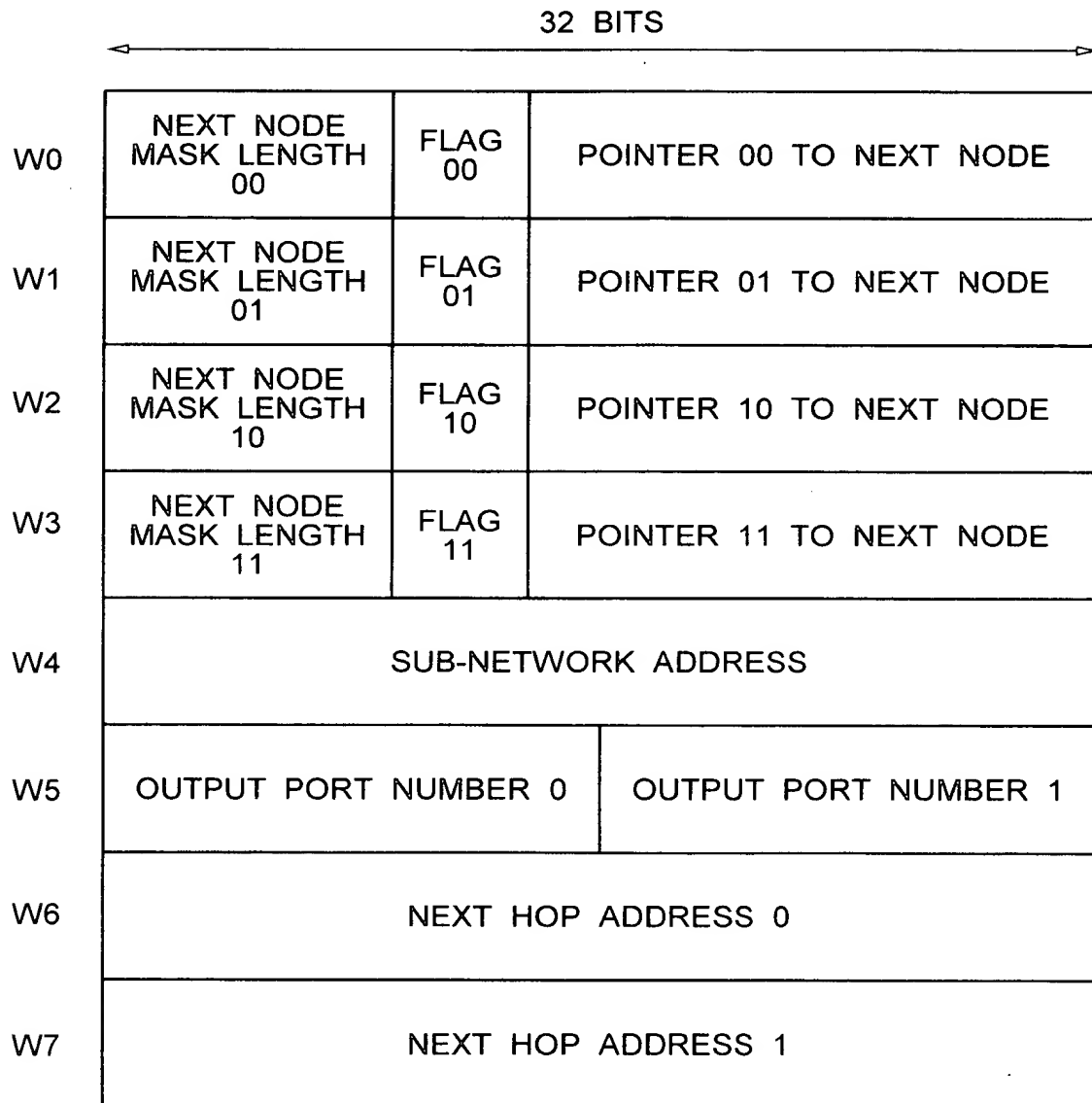
8-BRANCH TREE NODE

FIG. 34



2-BRANCH TREE NODE

FIG. 35



4-BRANCH TREE NODE

FIG. 36

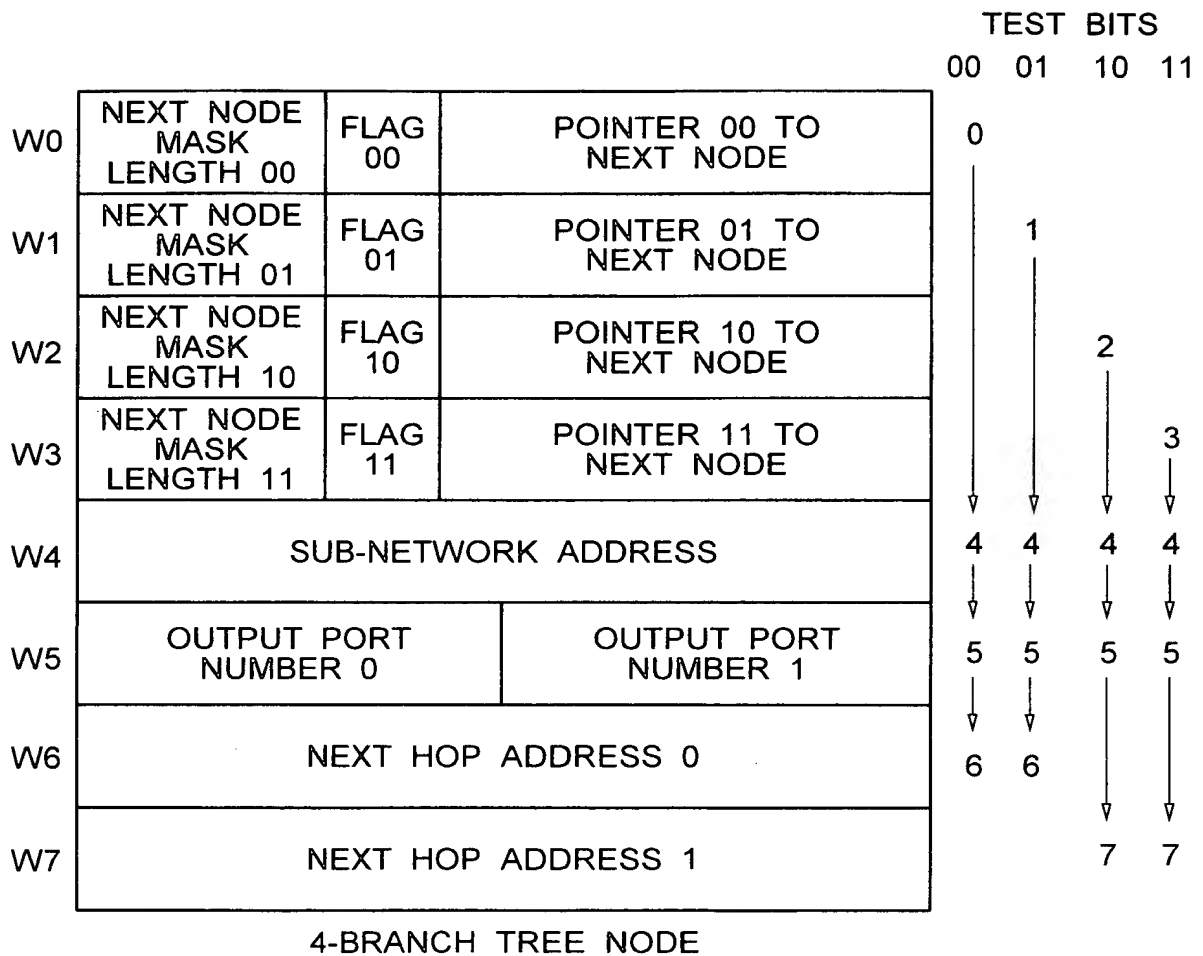
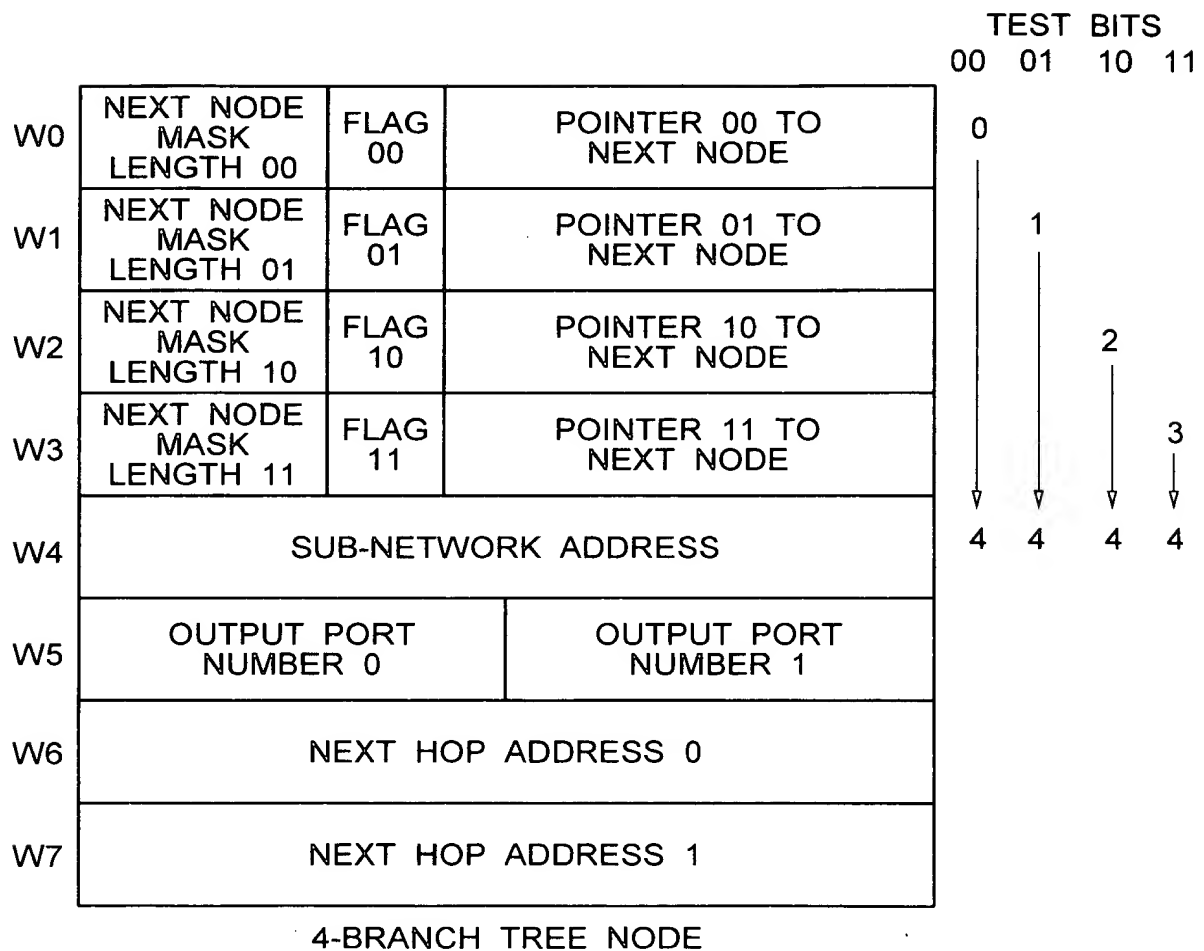


FIG. 37



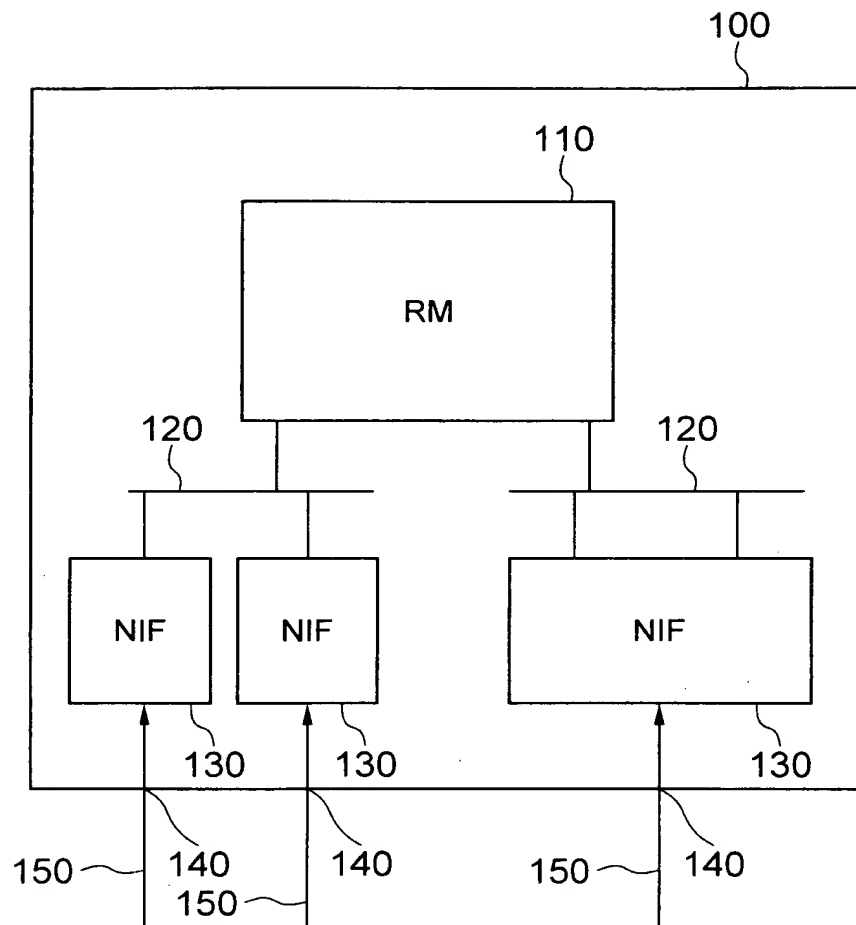


FIG. 39

